

### REMARKS

Claims 1-42 are currently pending in the subject application and are presently under consideration. Claims 1, 19-21, 26, 30, 39, 42 have been amended as shown on pp. 2 and 4-8 of the Reply and claim 41 has been cancelled. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

#### **I. Objection to Claims 19-21**

Claims 19-21 are objected to because of the following informalities: Claims 19-21 seem to be independent claims and thus should be rewritten in independent form for clarity. It is requested that this objection be withdrawn in view of the amendments to claims 19-21.

#### **II. Rejection of Claims 1-29 and 39-42 Under 35 U.S.C. §101**

Claims 1-29 and 39-42 stand rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. It is requested that this rejection be withdrawn for at least the following reasons. Claim 1 has been amended to recite *a memory operatively coupled to a processor retains at least one of the component, the first classification component or the second classification component*. Similarly, independent claim 42, as amended, recites, *a memory operatively coupled to a processor retains at least one of the means*. A memory is clearly hardware and thus statutory. In addition, independent claim 39 has been amended to recite *a computer executable API stored on a computer readable storage medium* and is thus statutory. Accordingly, it is requested that this rejection be withdrawn in view of the amendments to independent claims 1, 39 and 42.

#### **III. Rejection of Claims 1-5, 8-12, and 16-42 Under 35 U.S.C. §102(e)**

Claims 1-5, 8-12, and 16-42 stand rejected under 35 U.S.C. §102(e) as being anticipated by Bandini, *et al.* (US 7,117,358). It is requested that this rejection be withdrawn for at least the following reasons. Bandini, *et al.* does not disclose or suggest each and every aspect set forth in the subject claims.

A single prior art reference anticipates a patent claim only if it *expressly or inherently describes each and every limitation set forth in the patent claim*. *Trintec Industries, Inc. v. Top-U.S.A.*

*Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The ***identical invention must be shown in as complete detail as is contained in the ... claim***. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Applicants' claimed subject matter relates to a system and method that facilitates classifying messages for spam prevention by delaying delivery of suspicious messages until further information can be gathered about the messages. Specifically, independent claims 1, 30, 39 and 42 recite similar aspects, namely, ***the delay period is dynamically determined based in part on at least one of a probability that the set of messages are spam, a time of next filter update, a time of next filter download or a level of uncertainty***. Further, independent claim 1 (and similarly independent claims 30, 39 and 42) is amended to recite that ***the determined delay period is reduced when determined that the subset of messages have been quarantined by one or more server filters***. Bandini, *et al.* fails to teach or suggest these novel aspects.

Bandini, *et al.* relates to a system for reducing the number of spam messages received by a user wherein the system monitors incoming messages and compares the messages to data from a SPAM database to determine if the incoming message is legitimate or not. The SPAM database is constructed by responding to a user or administrator indications as to whether received messages are spam or not. (*See Abstract.*) If a comparison score, associated with a message and the SPAM database, is within a threshold range, the result is a borderline indication wherein the message is quarantined in a message store database and is examined by an administrator. (*See column 4, lines 28-35.*) Bandini, *et al.* is silent with respect to dynamically determining a delay period to hold the borderline messages in quarantine based on a probability that the borderline messages are spam, a time of next filter update, a time of next filter download and/or a level of uncertainty. The borderline messages are classified only when an administrator checks the messages and determines their classification. Messages that are in the quarantine folder will be transferred to an appropriate folder only after an active indication by an administrator and can lead to unnecessary delays. Further, the system disclosed by Bandini, *et al.* does not teach or suggest reducing the delay period associated with a message at a client filter when the message has been quarantined by a server filter.

Applicants' claimed subject matter, in contrast, relates to systems and methods that facilitate spam prevention by delaying delivery of suspicious messages until further information can be gathered about the messages to appropriately classify the messages. Specifically, a delay period begins when the message is marked for quarantine and can continue for a particular amount of time set by the system or user. For example, the filter can provide a recommended quarantine time based in part on the next filter update (scheduled update). The quarantine period can be automatically or manually set for any length of time such as 1 hour, 6 hours, or 24 hours. This means that information can be collected for 1 hour, 6 hours, or up to 24 or more hours after the message was moved to the delayed message store. More specifically, a quarantine time can be recommended based at least in part upon at least one of a probability (score) that the message is spam, a time of next filter update, time of next filter download (at which time the filter can decide whether to continue quarantining or make a final decision and repeat until a final decision is made) and/or a level of uncertainty associated with the message being quarantined. Since quarantining can be implemented by way of an API (application program interface), it is also possible to have  $m$  (e.g., an integer greater than or equal to 1) quarantine times (aggressive, moderate, conservative) passed into the appropriate API (*See* page 23, line 18 to page 24, line 5). In addition, the subject system enables clients to determine messages that have already been quarantined at the server. When both clients and servers implement quarantining, it may not be desirable for clients to quarantine messages that have already been quarantined at the server. Thus, the client can reduce the quarantining time appropriately, for example, by subtracting the amount of the time the message was quarantined at the server from the amount of time it would quarantine it. (*See* page 19, lines 24-28.)

Independent claim 39 recited updating one or more spam filters during the quarantine time based at least in part on one or more learning techniques that are employed during the quarantine time to receive additional data associated with the subset of messages and classifying the quarantined subset of messages as good or spam after the quarantine time by employing the one of more updated spam filters. Bandini, *et al.* is silent with respect to updating a spam filter during the quarantine period and merely classifies the quarantined messages by an active indication from an administrator. Bandini, *et al.* fails to disclose re-classifying the quarantined subset of messages as good or spam after the quarantine time by employing the updated spam filter.

Additionally, independent claim 42 recites means for creating a sub-filter by employing training data generated by user and system analysis wherein the sub-filter is trained on one or more features extracted from the untrustworthy or suspicious messages and means for applying the sub-filter to the untrustworthy or suspicious messages to classify them as good or spam. The system disclosed by Bandini, *et al.* merely relates to allowing an administrator to process borderline messages. Specifically, when a message is determined to be borderline, an e-mail relay provides an interface for an administrator to review quarantined messages. The administrator is preferably provided with a form, similar to that provided to a recipient, to indicate whether the borderline message is SPAM. When a message is identified as spam, the spam database is updated with message data. On the other hand, when the message is not identified as spam, it is delivered in the ordinary course to the designated recipient or recipients. (See column 7, lines 10-17.) Bandini, *et al.* does not teach creating and/or applying a sub-filter as disclosed by the subject specification.

Applicant's disclosed system teaches sorting quarantined messages that are classified at good at the end of the delay period by a release date. In particular, quarantined messages that are re-classified as good, can have an original time stamp of receipt by the server that is hours or days earlier than their release date and/or delivery date. This can be problematic for users who sort their messages by incoming/arrival date. Thus, "good" messages released from quarantine can be time stamped with their release date as well, particularly when quarantine periods last for more than a few hours and extend out one or more days. Such messages can include both dates and/or can be sorted primarily by their release date (See column 20, lines 23-29). Bandini, *et al.* is silent with respect to a time-stamp component that stamps an original arrival date on a message and a release date when the message is classified as good by a second classification component such that the message is sorted by the release date, as recited in dependent claim 26.

In view of at least the foregoing, it is clear that Bandini, *et al.* does not anticipate or suggest the subject invention as recited in claims 1, 30, 39 and 42 (and claims 2-5, 8-12, 16-29, 31-38 and 40-41 that depend there from). Accordingly, it is respectfully requested that this rejection be withdrawn.

**IV. Rejection of Claims 6-7 and 13-15 Under 35 U.S.C. §103(a)**

Claims 6-7 and 13-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bandini, *et al.* (US 7,117,358) in view of Lin (US 7,051,077). It is requested that this rejection be withdrawn for at least the following reasons. Bandini, *et al.* alone or in combination with Lin does not teach or suggest each and every aspect of the subject claims.

***[T]he prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 706.02(j). See also KSR Int'l Co. v. Teleflex, Inc., 550 U. S. \_\_\_, 04-1350, slip op. at 14 (2007). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on applicant's disclosure. See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).***

Applicants' subject claims relate to an intelligent quarantining system and method that facilitates a more robust classification system in connection with spam prevention. Claims 6-7 and 13-15 depend from independent claim 1. As discussed *supra*, Bandini, *et al.* fails to teach or suggest each and every aspect of independent claim 1. Lin relates to a fuzzy logic voting method and system to classify emails. However, Lin is silent with respect to determination of a delay period as well as classification of a subset of messages based on learning techniques that are employed to receive additional data associated with the subset of messages during the determined delay period. Further, Lin fails to disclose that the determined delay period is reduced when determined that the subset of messages have been quarantined by one or more server filters and thus does not cure the aforementioned deficiencies of Bandini, *et al.* with respect to independent claim 1. Accordingly, withdrawal of this rejection is respectfully requested.

**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP560US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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